To: Albright, David[Albright.David@epa.gov]
Cc: Harper, Jim[Harper.Jim@epa.gov]

From: Harper, Jim

Sent: Wed 2/4/2015 9:52:14 PM **Subject:** RE: UIC Follow-up Qs

There are 65 unique field name.

There are 68 unique injection zones

Below are the counts of injections zones within a field

Field & Zone	Count InjZone per Field	# FieldName	InjectionZone
Any Field	4	1Any Field	"102" Zone - Santa Margarita (Miocene)
		• • • • •	Formation
Arroyo Grande	2	2Arroyo Grande	"Irwin" Zone - Saugus (Pleistocene)
A 1 1.	1	2.4 1 1,	Formation
Asphalto	1	3Asphalto	"Lower Kraft" Zone - Pico (Pliocene)
Bardsdale	1	4Bardsdale	Formation 1ST MIOCENE (Upper "B" Sands)
Barham Ranch	1	5Barham Ranch	44 / Doud
Belridge, South	1	6Belridge, South	ANTELOPE SANDS
Brea-Olinda	1	7Brea-Olinda	Aurignac
Buena Vista	2	8Buena Vista	BASAL CHANAC/SANTA
D 1		0D 1	MARGARITA
Burrel	2	9Burrel	Basal Sespe - Sespe (Oligocene)
a 41			Formation
Casmalia	1	10Casmalia	CANTLEBERRY
Cat Canyon	3	11Cat Canyon	CHANAC
Chaffee Canyon	0	•	CHANAC/SANTA MARGARITA
Chico-Martinez	1	13Chico-Martinez	CHANAC-ROUND MOUNTAIN
Coalinga, East,	1	14Coalinga, East,	Dollie Zone
Extension		Extension	
Cymric	3	15Cymric	DOMENGINE
Deer Creek	1	16Deer Creek	ETCHEGOIN
Del Valle	0	17Del Valle	ETCHEGOIN (FAIRHAVEN)
Edison	3	18Edison	ETCHEGOIN/CHANAC
Elk Hills	3	19Elk Hills	ETCHEGOIN/SANTA MARGARITA
Elwood	0	20Elwood	GATCHELL, TEMBLOR, SANTA
			MARGARITA & ETCHEGOIN
Elwood, South,	0	21Elwood, South,	Holser - Modelo (Miocene) Formation
Offshore		Offshore	
Eureka Canyon	1	22Eureka Canyon	KERN RIVER
J		J	

Fruitvale	2	23Fruitvale	KERN RIVER,CHANAC,SANTA MARGAR	
Helm	4	24Helm	KERN RIVER/CHANAC	
Holser	1	25Holser	KERN RIVER/CHANAC/SNTA MARG	
Jacalitos	2	26Jacalitos	L. TULARE	
Jasmin	1	27Jasmin	Lanigan	
Kern Front	2	28Kern Front	Lombardi/Aurignac/Continental	
Kern River	8	29Kern River	LOWER TULARE	
Kettleman North	2		MIOCENE (D-2 ZONE)	
Dome		Dome	(
Lompoc	2	31Lompoc	MIOCENE/PLIOCENE	
Lost Hills	2	32Lost Hills	MONARCH (SPELLACY)	
Lost Hills,	1	33Lost Hills,	Monterey	
Northwest	-	Northwest		
Lynch Canyon	2	34Lynch Canyon	Monterey/Knoxville	
McCool Ranch	0	35McCool Ranch	OLCESE	
McKittrick	2	36McKittrick	OLCESE/FREEMAN-	
			JEWETT/VED/WALK	
Midway-Sunset	7	37Midway-Sunset	Old Zone	
Monroe Swell	1	38Monroe Swell	PHACOIDES/OCEANIC	
Mount Poso	4	39Mount Poso	PLEISTOCENE-PLIOCENE	
Mountain View	3	40Mountain View	PLEISTOCENE-PLIOCENE-SANTA	
			MARGARITA	
Newhall	1	41Newhall	PLIOCENE	
Ojai	0	42Ojai	PLIOCENE, ST. MARGARITA, ZILCH	
Oxnard	0	43Oxnard	PLIOCENE-MIOCENE	
Placerita	0	44Placerita	Pools "I - V" Modelo (Miocene)	
			Formation	
Pleasant Valley	1	45Pleasant Valley	POTTER	
Poso Creek	6	46Poso Creek	Puente / Miocene M2B through T (zones	
			4 through 1)	
Raisin City	1	47Raisin City	PYRAMID HILL/VEDDER	
Rincon	1	48Rincon	REEF RIDGE (OLIGOCENE)	
		49Riverdale	Rincon-Vaqueros (Miocene) and Upper	
Riverdale	1	4)Kiverdaic	Sespe (Oligocene)	
Rosedale Ranch	1	50Rosedale Ranch	SAN JOAQUIN-ETCHEGOIN	
Round Mountain	5	51Round Mountain	Santa Margarita	
San Ardo	2	52San Ardo	SANTA MARGARITA/VEDDER	
Sansinena	1	53Sansinena	SANTA	
			MARGARITA/VEDDER/FAMOSO	
Santa Susana	0	54Santa Susana	Sisquoc	
Sespe	2	55Sespe	SPELLACY	
Tapo Canyon,	0	56Tapo Canyon,	TEMBLOR	
South		South		
Tapo, North	1	57Tapo, North	TRANSITION	
Tejon	2	58Tejon	TRANSITION/SANTA MARGARITA	

Timber Canyon 0 59Timber Canyon TULARE

Torrey Canyon 1 60Torrey Canyon TULARE (UNSATURATED)
Union Avenue 1 61Union Avenue TULARE (UPPER,AIR SANDS)

Vallecitos 1 62Vallecitos TULARE/ETCHEGOIN

Van Ness Slough 1 63Van Ness Slough TULARE/OLIG Whittier 1 64Whittier TULARE/POTTER

Yowlumne 1 65Yowlumne TULARE/SAN JOAQUIN

66 VEDDER

67 VEDDER/WALKER

68 WALKER

From: Albright, David

Sent: Wednesday, February 04, 2015 11:54 AM

To: Harper, Jim

Subject: FW: UIC Follow-up Qs

Hi Jim,

Could you possibly review the attached spreadsheet and give me a count of the number of specific fields/injection zones listed? If I could get a conclusion that says something like X different unique injection zones in Y different oil fields, that would be great. Note that in some cases, the injection zone is blank, so you would just have the field information.

Let me know if you have any questions.

Thanks, David

From: Habel, Rob@DOC [mailto:Rob.Habel@conservation.ca.gov]

Sent: Thursday, January 22, 2015 5:00 PM

To: Montgomery, Michael

Cc: Albright, David; Dermer, Michele; Bishop, Jonathan@Waterboards; Bohlen, Steven@DOC

Subject: FW: UIC Follow-up Qs

Mike:

Please find the attached Excel file where staff have summarized data in response to your questions. The information is copied below.

Summary		Count	%
% of Wells that have sub- 3000 mg/L TDS		176	33%
% of Wells that have 3000-10000 mg/L TDS		279	52%
% of Wells that have no TDS data (as of 1/22/15 1:30 PM)		48	9%
% of Wells that have TDS >= 10000 mg/L		29	5%
	Total	532	100%

There are 43 wells that did not report any injection.

Our database is limited for well depth information. The attached indicates a range of depths based in the Top and Bottom Perf and True Vertical Depth data. These fields in the database have a lot of blanks (no entries).

Please let me know if you have any questions.

Thanks,